

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-13 (Canceled).

14. (Withdrawn) ~~Method~~A method for rapid angiogenesis targeting ~~wherein an antibody with specific affinity for a characteristic epitope of the ED-B domain of fibronectin, the antibody having improved affinity to said ED-B domain, is used comprising administering an antibody conjugate of claim 20.~~

15. (Withdrawn) ~~Method~~The method according to claim 14 for immunoscintigraphic detection of angiogenesis.

16. (Withdrawn) ~~Method~~The method according to claim 15 for detecting diseases characterized by vascular proliferation ~~such as diabetic retinopathy, age-related macular degeneration or tumours.~~

17. (Withdrawn) ~~Method~~The method according to claim 14, wherein the antibody localizes the ~~respective target~~ tissue three to four hours, ~~most preferably 3 hours~~ after its injection.

Claim 18 (Canceled).

19. (Withdrawn) ~~Method~~A method for diagnosis and therapy of ~~a~~ tumours ~~and or a~~ diseases characterized by vascular proliferation ~~wherein an antibody with specific affinity for a characteristic epitope of the ED-B domain of fibronectin, said antibody having improved affinity to said ED-B domain, is used comprising administering an antibody conjugate of claim 20.~~

20. (Currently Amended) A The conjugate comprising an antibody with ~~a specific, high an affinity (Kd)~~ for the ED-B domain of fibronectin of less than about 54pM, and a molecule which induces blood coagulation and blood vessel occlusion.

21. (Currently Amended) A The conjugate according to claim 20 wherein the molecule which induces blood coagulation and blood vessel occlusion is a photoactive molecule.

22. (Currently Amended) A The conjugate according to claim 21 wherein the photoactive molecule is a photosensitizer.

23. (Currently Amended) A The conjugate according to claim 22 wherein the photosensitizer absorbs at a wavelength above 600 nm.

24. (Currently Amended) A The conjugate according to claim 22 wherein the photosensitizer is a derivative of tin (IV) chlorine e6.

25. (Withdrawn) ~~Method-a~~ The method for the treatment of an angiogenesis-related pathologies ~~wherein a pathology comprising injecting a conjugate according to claim 20 is injected~~.

26. (Withdrawn) ~~Method-a~~ The method for the treatment of an angiogenesis-related pathologies ~~wherein a pathology comprising injecting a conjugate according to claim 22 is injected~~, followed by irradiation.

27. (Withdrawn) ~~Method-a~~ The method according to claim 26 wherein the angiogenesis-related pathology treated is caused by ~~a~~ or associated with ocular angiogenesis.

28. (Currently Amended) A The conjugate according to claim 20, wherein said affinity is ~~in the subnanomolar range 27 to 54pM~~.

29. (Currently Amended) A The conjugate according to claim 28 wherein the molecule which induces blood coagulation and blood vessel occlusion is a photoactive molecule.

30. (Currently Amended) A The conjugate according to claim 29 wherein the photoactive molecule is a photosensitizer.

31. (Currently Amended) A The conjugate according to claim 30 wherein the photosensitizer absorbs at a wavelength above 600 nm.

32. (Currently Amended) A The conjugate according to claim 30 wherein the photosensitizer is a derivative of tin (IV) chlorine e6.

33. (Currently Amended) A The conjugate according to claim 20, wherein the antibody is an scFv antibody.

34. (Currently Amended) A The conjugate according to claim 33, wherein the antibody is a recombinant antibody.

35. (Currently Amended) A conjugateThe conjugate according to claim 33, wherein the antibody comprises a limited number of mutations in its CDR residues further comprising at least one mutation in one or more residues of its CDR regions, which increases the affinity of the antibody for the ED-B domain.

36. (Currently Amended) A conjugate according toThe conjugate of claim 35 38 further comprising at least one mutation in one or more residues of its CDR regions, wherein the mutated residues affinity of the antibody for the ED-B domain is increased, and wherein said mutation(s) are in at least one residue corresponding to residues 31-33, 50, 52 and/or 54 of its the VH domain of SEQ ID NO: 30 and/or residues 32 and/or 50 of its the VL domain of SEQ ID NO: 32.

37. (Currently Amended) A The conjugate according to claim 28, wherein the antibody binds to the ED-B domain of fibronectin with a  $K_d$  of about 54 pM.

38. (Currently Amended) A The conjugate according to claim 28 with the following amino acid sequence

VH domain (SEQ ID NO: 19)

E V Q L L E S G G G	L V Q P G G S L R L	S C A A S G F T F S
S F S M S W V R Q A	P G K G L E W V S S	I S G S S G T T Y Y
A D S V K G R F T I	S R D N S K N T L Y	L Q M N S L R A E D
T A V Y Y C A K P F	P Y F D Y W G Q G T	L V T V S S

Linker (SEQ ID NO: 20)

G D G S S G G S G G A S T G

VL domain (SEQ ID NO: 21)

E I V L T Q S P G T	L S L S P G E R A T	L S C R A S Q S V S
S S Y L A W Y Q Q K	P G Q A P R L L I Y	Y A S S R A T G I P
D R F S G S G S G T	D F T L T I S R L E	P E D F A V Y Y C Q
Q T G R I P P T F G	Q G T K V E I K	

39. (Currently Amended) A The conjugate according to claim 20, wherein said affinity is about 0.05-nM 50-54pM.

40. (New) The conjugate according to claim 20, wherein the fibronectin is human.

41. (New) The conjugate according to claim 20, wherein the antibody comprises the VH domain of SEQ ID 19.

42. (New) The conjugate according to claim 20, wherein the antibody comprises the VL domain of SEQ ID 21.

43. (New) The conjugate according to claim 35, wherein the number of mutations is 1-3.

44. (New) The conjugate according to claim 43, wherein the number of mutations is 2.

45. (New) The conjugate according to claim 44, wherein the number of mutations is 1.

46. (New) The conjugate according to claim 36, wherein the number of mutations is 1-3.

47. (New) The conjugate according to claim 46, wherein the number of mutations is 2.

48. (New) The conjugate according to claim 47, wherein the number of mutations is 1.

49. (New) The method of claim 16 wherein said disease is diabetic retinopathy, age-related macular degeneration or a tumour.

50. (New) The method of claim 17 wherein said antibody localizes in three hours.